



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,531	07/25/2003	John Harvey	030299	2906

23696 7590 10/02/2006
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT PAPER NUMBER

2612

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,531	Applicant(s) HARVEY, JOHN	
	Examiner Julie Lieu	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2, and 4-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed July 17, 2006. Claim 1 has been amended. Claim 3 has been canceled.
2. The indicated allowability of claim 3-24 is withdrawn. Rejections follow.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 1-2, 4-5, 7-10, 12-15, 17-19, 22, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lauber et al. (US 2004/0090950 A1).

Claim 1:

Lauber et al. (Lauber) discloses method for providing a virtual fences for use with a delivery vehicle, comprising:

- a. determining that an activation event is a sub-event (vehicle at the loading dock);
- b. activating a first virtual fence (vehicle route geofence); and
- c. concurrently activating a second virtual fence (geofence for loading dock area);
- d. wherein activation of at least one of the virtual fence is based the sub-event.

See para. [0393].

Art Unit: 2612

Claim 2:

The first and second virtual fence in Lauber is selected from a group comprising a boundary fence, a perimeter fence, and a route fence.

Claim 4:

The sub-event in Lauber is one of a vehicle sub-event, a trailer sub-event, and a driver sub-event. See para. [0393].

Claim 5:

The method disclosed by Lauber comprises a step of activating one of a boundary fence, a perimeter fence, and a route fence based on the sub-event.

Claim 7:

The method in Lauber further comprises steps of determining that the protection event is a deactivation event; and deactivating a virtual fence based on the activation event.

Claim 8:

Lauber discloses a protection system that operates to provide a virtual fence for use with a delivery vehicle, the protection system comprising:

- a. input logic that is coupled to receive a protection signal;
- b. fence logic that is coupled to the input logic, being operable to activate a first selected virtual fence from a plurality of virtual fences in response to said protection signal being indicative of one of a plurality of activation events involving vehicle motion and not having vehicle engine dependence, the fence logic being further operable to concurrently activate a route fence along a route of said delivery vehicle, from said plurality of virtual fences, in connection with a determination of a delivery vehicle route.

See paras. [0322], [0323], and [0393].

Claims 9 and 10:

The input logic in Lauber is operator input logic and the protection signal can be either an operator input signal or a sensor input. Paras. [0407-0410] and [0421].

Claim 12:

In the Lauber system the input logic is position input logic and the protection signal is a position signal.

Claim 13:

The input logic disclosed in Lauber is communication input logic and the protection signal is a communication signal.

Claim 14:

In Lauber's, the protection signal is any combination of an operator signal, a sensor signal, a position signal, and a communication signal.

Claim 15:

The Lauber system further comprises position logic that operates to determine a vehicle position, wherein the position logic outputs the vehicle position in a position signal that is the protection signal. See para. [0393].

Claim 17:

Lauber discloses an apparatus for providing a virtual fence for use with a delivery vehicle, the apparatus comprising:

- a. means for detecting a protection event (vehicle in motion result in GPS location changes);

Art Unit: 2612

- b. means for determining that the protection event is one of a plurality of activation events involving vehicle motion and not having vehicle engine dependence;
- c. means for activating a selected virtual fence, from a plurality of virtual fences, based on the activation event; and
- d. means for concurrently activating a route fence along a route of said delivery vehicle, from said plurality of virtual fences, in connection with a determination of said route of the delivery vehicle.

See paras. [0322], [0323], and [0393].

Claim 18:

The Lauber system includes means for determining that the activation event is a sub-event (vehicle at loading dock) and means for activating the selected virtual fence based the sub-event.

Claim 19:

Lauber disclose means for activating one of a boundary fence, a perimeter fence, and a route fence based on the sub-event.

Claim 22:

The Lauber system further comprises means for deactivating a virtual fence based on the activation event.

Claim 24:

Lauber discloses a computer-readable medium comprising computer-executable instructions for providing a virtual fence for use with a delivery vehicle, the instructions when executed perform a method, comprising steps of:

Art Unit: 2612

- a. detecting a protection event;
- b. determining that the protection event is an activation event;
- c. activating a selected virtual fence from a plurality of virtual fences based on one of a plurality of activation events involving vehicle motion and not having vehicle engine dependence, and
- d. activating a route fence along a route of said delivery vehicle, from said plurality of virtual fences, in connection with a determination of a delivery vehicle route.

Claim Rejections - 35 USC § 103

5. Claims 6, 11, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauber et al. (US 2004/0090950 A1) in view of Moses (US 2003/0169853).

Claims 6, 11, and 20:

The reference fails to clearly state whether the delivery vehicle is one with combination of a tractor and trailer. Nevertheless, tractor/trailer trucks are conventionally used as delivery vehicle. Further, the concept of tracking tractor/trailer-type delivery vehicle when a vehicle sensor senses disconnection between the tractor and trailer is old in the art as taught in Moses. See para. [0022]. In light of Moses, it would have been obvious to one skilled in the art to add this detection feature in the system of Lauber and use it to inform a possible theft condition and/or to initiate a geofencing activation event because it is a possible theft condition and vehicle tracking should be initiated.

Claim 21:

Moses also teaches monitoring each critical asset 50. Thus, one skilled in the art would have incorporate this concept into the Lauber system because it would be desirable to track each asset, especially if they are critical as taught in Moses. See para. [0022].

6. Claims 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauber et al. (US 2004/0090950 A1) in view of Andre et al. (US 2003/0151507).

Claims 16 and 23:

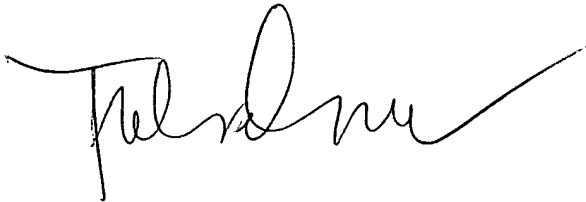
The Lauber system further fails to disclose a message processing logic that is coupled to the fence logic, wherein the message processing logic outputs a vehicle message that is used to control a vehicle control system. However, the concept of controlling the vehicle when a theft condition exists or potentially happens is well known in the art as taught in Andre et al. See para. [0005]. In light of this teaching, one skilled in the art would have readily recognized the desirability of controlling the vehicle when theft condition is detected as taught in Andre et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal flourish extending to the right.

Julie Lieu
Primary Examiner
Art Unit 2612

Sept 25, 06